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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/584,210

05/16/2007

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15455NP

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EXAMINER

IQBAL, SYED TAHA

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

05/05/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/584,210	Applicant(s) PITIOT ET AL.	
	Examiner SYED IQBAL	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

Claims 1-28 were previously rejected. Claims 1-28 are currently pending. No new claims have been added.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13 and 16-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chan et al. US 2003/0203353, as previously discussed.

In addition, regarding the definition of steady state conditions which require that the flow be constant over time, Chan teaches that the flow can be maintained at a constant level in the channel (Para [0039]).

However, the reference is silent on the actual rate of volumetric flow through the channel.

At the time of invention it would one having an ordinary level of skill in the art to perform routine experimentation to determine either a suitable or optimal flow rate for the process. One would be motivated to do so because the flow rate would not influence the analyzer function and would not lead to any unexpected results.

Claims 14, 15, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chan et al. US 2003/0203353, in view of Yamamoto et al. US 2002/0094303, as previously discussed.

Applicant's arguments filed 01/19/2010 have been fully considered but they are not persuasive. Applicant argues that the method of Chan is specifically dedicated to determine characteristics of transient condition and does not measure such characteristics under "steady conditions". The reference teaches that in the method of measuring characteristics of fluid flow in a micro channel, the flow can be varied and the device is "capable" of detecting properties in such situations. However, the reference teaches that the variation in flow rate is generally carried out in accordance with a user input flow profile and therefore the fluid flow is predetermined by a user. This would suggest that any flow profile desired by a user can be implemented to the method. Controls for the flow rates are also taught. These can provide the ability to manipulate the flow through the channel. Considering that the fluid flow pattern can be selected by the user and the control abilities are provided, one skilled in the art would have been able to determine either a constant or variable flow rate for the fluid flow rate as this would not hinder the detection properties of the system.

Applicant further argues that the reference teaches away from using a constant flow rate and that Chan "emphasizes the desire" for a variable fluid flow. The reference teaches individual scenarios where the reaction kinetics of the fluids in micro flow channel are measured at different flow rates. However a scenario where, in the

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alternative the detector, is moved along different points of the flow channel while keeping the flow constant is also taught (Para [0039]).

Applicant further argues that Yamamoto et al cannot be used to cure the differences between the teaching of Chan and the present invention for the reasons set forth for the Chan reference. However as set forth in the previous action and the arguments above, the deficiency of using multiple reactors in the Chan reference has been fulfilled by Yamamoto.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SYED IQBAL whose telephone number is (571)270-5857. The examiner can normally be reached on Monday to Thursday 7:30am EST to 6:00pm EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on 5712721358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

/S. I./

Examiner, Art Unit 1793

/Stuart Hendrickson/

Primary Examiner, Art Unit 1793